



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,736	03/12/2002	Ryo Sakurai	Q68683	9719

7590 10/24/2002

Sughrue Mion Zinn  
Macpeak & Seas  
2100 Pennsylvania Avenue NW  
Washington, DC 20037

EXAMINER

NGUYEN, CHAU N

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 10/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

P-5

# Office Action Summary

Application N .

10/070,736

Applicant(s)

SAKURAI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) ✓
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 11-13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (5,003,126) in view of Yoshikawa et al. (6,255,778).

Fujii et al. discloses a shielded flat cable comprising a cable body in which a plurality of conductors including at least one ground line (2, Fig. 2) is covered except at least part of the ground line with an insulating member, a shielding member having a shielding layer (1) made of a conductive material formed on one side of an insulating substrate for sheathing the cable body, and a conductive adhesive layer (6) being in contact with the non-covered portion of the ground line for bonding the shielding member to the cable body.

Fujii et al. does not specifically disclose the conductive adhesive layer comprising an adhesive with conductive particles dispersed therein, nor the

adhesive being a thermally or optically curable adhesive comprising a resin having heat resistance and flexibility after curing as a base resin.

Yoshikawa et al. discloses a shielding material which is a conductive adhesive material comprising an adhesive with conductive particles dispersed therein, and the adhesive is a thermally curable adhesive comprising a resin having heat resistance and flexibility after curing as a base resin (etc., the resin being an EVA).

It would have been obvious to one skilled in the art to use the conductive adhesive material as taught by Yoshikawa et al. for the conductive adhesive material of Fujii et al. since the conductive adhesive material taught by Yoshikawa et al. has good adhesion properties, high moisture proof and heat resistance.

The modified cable of Fujii et al. also discloses the resin being an EVA (re claim 2), the adhesive comprising an organic peroxide (col. 9, 19-42) in an amount of 0.1 to 10 parts by weight based on 100 parts by weight of the base resin (re claim 11), the adhesive comprising at least one reactive compound which is an acryloxy group-containing compound (col. 9, lines 47-51) in an amount of 0.5 to 80 parts by weight based on 100 parts by weight of the base resin (re claim 12), the adhesive comprising a silane coupling agent (col. 10, lines 16-28) in an amount of 0.01 to 5 parts by weight based on 100 parts by weight of the base resin (re claim

13), the amount of the conductive particles being 0.1 to 15% volume relative to the adhesive (col. 6, lines 46-49) (re claim 15), the average particle diameter of the conductive particles being 0.1 to 100  $\mu\text{m}$  (re claim 16), a metal filler being used as the conductive particles (re claim 17), and nickel powders being used as the metal filler (re claim 18).

3. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Yoshikawa et al. as applied to claim 1 above, and further in view of Shibata et al. (3,926,918).

Claims 3-5 additionally recite the resin being a polymer obtained by acetalizing a polyvinyl alcohol, wherein the content of the acetal group in the polymer is 30 mol% or more. Shibata et al. discloses a process for producing polyvinyl acetals which can be used as adhesives (col. 1, lines 1-9). Shibata et al. discloses the process comprising acetalizing a polyvinyl alcohol, wherein the content of the acetal group in the polymer is 30 mol% or more.

It would have been obvious to one skilled in the art to use the polymer taught by Shibata et al. for the resin of the modified Fujii et al. cable since the polymer taught by Shibata et al. has superior moldability or processability.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Yoshikawa et al. as applied to claim 1 above, and further in view of Lin (6,027,802).

Claim 6 additionally recites the resin being a polyester unsaturated compound soluble in a solvent. Lin discloses a cover tape comprising an adhesive layer which is comprised of a polyester unsaturated compound soluble in a solvent (col. 6, lines 45-51). It would have been obvious to one skilled in the art to use the resin taught by Lin for the resin of the modified Fujii et al. cable since such resin is one of the known heat sealable and heat activated elastomers as taught by Lin.

5. Claims 7-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Yoshikawa et al. as applied to claim 1 above, and further in view of JP10-251606 (JP'606).

JP'606 discloses a conductive adhesive, wherein the resin is mixed with the material as claimed in claims 7-10 and a hydrocarbon resin as claimed in claim 14. It would have been obvious to one skilled in the art to mix the resin of the modified Fujii et al. cable with the material taught by JP'606 to obtain an adhesive which has high electric conductivity and adhesiveness.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Yoshikawa et al. as applied to claim 1 above, and further in view of Tanaka (5,455,383).

Claim 19 additionally recites a flame retardant film being used as the substrate for the shielding member. Tanaka discloses a shielded flat cable comprising a flame retardant film as a substrate for a shielding member. It would have been obvious to one skilled in the art to use the flame retardant film as taught by Tanaka for the substrate of the Fujii et al. shielding member to provide the cable with a flame resistance property.

#### ***Cited Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hara, Verma, JP4-33211, and JP8-7664 disclose flat cables having at least one ground line and shielding members.

#### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen  
Primary Examiner  
Art Unit 2831

CN  
October 15, 2002